



UNIVERSITY OF GOTHENBURG
Department for political science

Environmental Security in the European Union

Can epistemic communities explain the incorporation of environmental aspects in the
Common Foreign and Security Policy in the European Union?

C, D Thesis
Spring 2008
Words: 13 389
Author: Elin Israelsson
Supervisor: Ulrika Möller

Abstract

The thesis addresses the recent acknowledgement to incorporate environmental aspects in international security politics. The study intends to examine if epistemic communities, within the resource scarcity school, is a plausible explanation for *how* and *why* environmental aspects are incorporated in the European Union's (EU) Common Foreign and Security Policy (CFSP). A text analysis was used to answer the first question in the thesis: *how does the EU incorporate environmental aspects in the CFSP given the analytical tool?* Informant interviews with key persons in the CFSP process together with the results from the text analysis were then used to answer the second question in the thesis: *Can epistemic community participation in the CFSP negotiation explain the CFSP outcome?* The results showed that epistemic communities' participation in the CFSP process was verified and also perceived to have shaped the CFSP outcome. However, some caveats regarding direct causality should be kept in mind.

Key words

Environmental security, epistemic community, EU, CFSP, renewable resource scarcity, neo-Malthusianism, Cornucopianism

Abbreviations

CFSP	Common Foreign and Security Policy
CFSP process	Refers to the preparation and formulation of the CFSP outcome.
CFSP outcome	Refers to the output of the CFSP, for example common strategies, common measures, common standpoints, statements, agreements with other countries or international institutions. In this study two documents, the European Security Strategy and the Climate Change and International Security constitute the CFSP outcome.
EU	European Union

Table of Content

1. INTRODUCTION	4
1.1 EXPLORING IMPACT OF EPISTEMIC COMMUNITIES ON THE CFSP IN THE EU	5
1.2 PURPOSE AND QUESTIONS	6
2. THEORETICAL APPROACH.....	6
2.1 RENEWABLE RESOURCE SCARCITY AND THE SECURITY DEBATE	7
2.1.1 <i>The “resource scarcity school” and its main antagonists</i>	7
2.2 INCORPORATION OF ENVIRONMENTAL ISSUES IN FOREIGN- AND SECURITY POLICY	9
2.2.1 <i>Epistemic community theory</i>	12
2.2.2 <i>Epistemic community theory’s influence on foreign and security policy</i>	14
2.3 LIMITATIONS	15
3. STUDY DESIGN	16
3.1 DESCRIPTIVE TEXT ANALYSIS TO MEASURE INFLUENCE IN POLICY OUTCOME.....	16
3.1.1 <i>Analytical tool</i>	17
3.1.2 <i>Criteria’s for conclusions regarding influence on outcome</i>	18
3.1.3 <i>Material for text analysis</i>	19
3.2 INTERVIEWS TO MEASURE INFLUENCE BY PARTICIPATION	19
3.2.1 <i>Interview guidance</i>	20
3.2.2 <i>Criteria’s for conclusions of the second part</i>	21
3.2.3 <i>To generalise the results?</i>	22
3.3 PRESENTATION OF THE IDEAL TYPES.....	23
3.3.1 <i>Neo-Malthusianism</i>	23
3.3.2 <i>Cornucopianism</i>	24
3.4 PRESENTATION OF THE ANALYTICAL SCHEME	26
4. RESEARCH FINDINGS	27
4.1 CORRELATION WITH THE CFSP OUTCOME?	27
4.1.1 <i>The view of the present</i>	27
4.1.2 <i>The view of the future</i>	30
4.1.3 <i>Brief summary of correlation findings</i>	31
4.2 PARTICIPATION AND LINKAGES TO THE CFSP OUTCOME?	32
4.2.1 <i>Participation in the CFSP negotiation</i>	32
4.2.2 <i>Participation linked to the CFSP outcome?</i>	33
4.2.3 <i>Brief summary of participation and linkages findings</i>	33
4.3 NONE, LOW OR HIGH INFLUENCE?	34
5. CONCLUSIONS.....	35
6. DISCUSSION.....	35
7. FURTHER RESEARCH	36
8. BIBLIOGRAPHY	38

1. Introduction

“...the most severe threats to security of human beings are environmental impact and climate change.” (SvD, 2008)

This announcement from one vice president of the European Commission is interesting, because traditionally environment and security are kept apart. The debate on an expansion of the concept of security intensified during the aftermath of the Cold War and after the disappearance of the bipolar confrontation “non military” issues, such as environmental aspects, appeared on the international security arena (Andersson Scott et al 2007: 9; Buzan, Waever & de Wilde 1998: 9; Gleditsch 1998: 382; Raleigh & Urdal 2007: 675; Theisen 2006: 5). The European Commission (2008) points out that “the scope [of security] has widened from the purely military to include broader political, economic, social, and environmental aspects.” Also, environmental degradation has been recognized as a “non-military threat” to national and international peace and security in the United Nation’s Security Council (Elliot 2004: 210, Gleditsch & Nordås 2007: 2). This illustrates that the environment has gained a place within the international security debate, not only as a pure political issue, but also as a political *security* issue (Buzan et al 1998; de Soysa 2002, 2; Graeger 1996, 111; Ronnfeldt 1997, 474). Yet, it is not so clearly illustrated *in what way* and *why*. What can help explain this development?

Environmental issues could be embraced in international security politics because constituting objective threats to international security in terms of for example water scarcity leading to violent conflict. However, adjustment to incorporate environmental issues might also be understood by non-state actors advocating a broader security concept (Betsill & Corell 2008; Gulbrandsen & Andresen 2004: 54; Urdal 2005: 418; Weyand 1999). Arguably, the end of the Cold War triggered a search for a new concept of security,¹ which is thought to have been advantageous for non-state actors such as epistemic communities within the environmental security field (Buzan et al 1998; Haas 1992). Scholars uphold that epistemic communities, often explained as knowledge-based policy networks of scientists with shared beliefs in cause-and effect relations, exert influence on policy.² The way scientific arguments structure political environmental security debates, in comparison to other security sectors, is accentuated as exceptional especially regarding complex issues (Adler & Haas 1992; 373,

¹ Besides military security, concerning the two-level interplay of armed offensive and defensive capabilities of states, and states' perceptions of each other's intentions which could be considered to be “traditional” security concept, there are a development to a broader security concept to include, among other issues, environmental concerns. See for example Buzan 1991: 433

² The epistemic community theory approach could be considered complementary to conventional international relations literature such as neorealism. See Dunlop 2000: 139.

Buzan et al 1998: 71-73, 77; Eriksson & Noren 2002: 16-17; Haas 1992: 1-4; Jordan 2005: 164, 175).

The scientific theoretical debate of a broadened security concept began in the early 1970's, but it was not until the beginning of 1990's that more empirical research was initiated. This first systematic research was conducted within the "resource scarcity school" and research findings emphasized an existing link between scarcity in renewable natural resources and violent conflict (measurement for security) (Homer-Dixon 1991: 77; Homer-Dixon 1994: 36f; Ronnfeldt 1997: 474-475). Some researchers argue that a link between environment and security is scientifically not so clear-cut (Gleditsch 1998, 383-384; Lomborg 2001). But even though there are different understandings on a possible link between environment and security, the resource scarcity school is a substantial part of the environment and security debate. Moreover, epistemic communities from this strand of thought have proven influential in shaping the foreign and security policy in for example the US (Buzan et al 1998, 1, 71; de Soysa 2001: 1; Timura 2001: 104-105).

To understand how and why environmental issues are incorporated in foreign and security policy, the articulated link between science and policy is interesting to depart from. With the character of an epistemic community, and due to its centrality in the environmental security debate, the "resource scarcity school's" plausible influence on international security policy is elaborated in this thesis. This could bring more clarity to how and also, partly, why environmental issues are incorporated in international security politics in general.

1.1 Exploring impact of epistemic communities on the CFSP in the EU

Why environment and security in the EU? The European environmental security debate has recently been given public attention (DN 2008; SvD 2008). The changing security landscape is especially shown in the contemporary security thinking of the EU where increasing involvement in the work of providing for safety and security of, for example, the *environment* is present. Since the end of the Cold War the EU is struggling to obtain a "new" security role and environmental security is argued to have received attention around the mid 1990's (Bremberg & Britz 2007: 3). The EU, as a system, also faces greater complexity with environmental governance in comparison to member states (Aggestam 2000: 20; Zito 2001) and the role of science in international relations is revealed more readily than it is in member countries (Boehmer-Christiansen 1996: 192). It is tempting to consider that the attention to environment and security in the EU might have coincided with the scientific environmental security research within the "resource scarcity school". Due to the argued overlap between science and policy (especially regarding issues characterized with uncertainty), it is interesting to examine epistemic communities possible impact on the Common Foreign and

Security Policy (CFSP) in the EU to incorporate environmental issues (Haas 1992: 1-4; Zito 2001: 465). The lack of understanding what political structures environmental concerns will produce, motivates the search for these plausible explanatory factors (Aggestam 2000; Buzan et al 1998: 71).

1.2 Purpose and questions

The thesis has a theoretical and an empirical purpose. The theoretical purpose is to contribute to how and why environmental issues emerge in international security politics, more specific, the CFSP in the EU. The thesis uses a theory testing approach, and should contribute to the epistemic community theory. The study should help understand if epistemic communities are a plausible explanation to the incorporation of environmental issues in the CFSP and addresses the following questions:

1. In what way does the EU incorporate environmental aspects in the CFSP?
2. Can epistemic community participation in the CFSP negotiation explain the CFSP outcome?

The empirical purpose (measure possible epistemic community influence) is divided in two steps to help the realization of the theoretical purpose; text analysis and informant interviews. The first step is necessary for the second step and should answer how the EU incorporates environmental aspects in the CFSP. In the first step, the purpose is to compare the understandings of the “resource scarcity school” with the CFSP outcome to measure correlation (or lack of it) between the two. To accomplish the first step an analytical tool is created. The second step should help answering why environmental aspects are incorporated in the CFSP (causality). Here, the purpose is to examine if epistemic communities (with the “resource scarcity school” view) participated in the CFSP negotiation and if this possible participation could be linked to the possible correlation examined in the first step.

2. Theoretical approach

The theoretical section starts with a discussion of environmental security with a focus on the “resource scarcity school”. Then, several different factors that could have influenced international politics to incorporate environmental issues are related to epistemic communities and elaborated in brief. After this, the epistemic community theory as an influence on the CFSP in the EU is outlined with a connection to the “resource scarcity school”.

2.1 Renewable resource scarcity and the security debate

After the end of the Cold War, conflicts along ideological dividing-lines declined and the role of renewable natural resources was by many understood as filling this gap (Buzan 1991: 434f; Gleditsch 2001: 177; Gleditsch & Theisen 2006: 2). In the Cold War national states and military power were considered prominent in the geopolitical security concept and the environment is understood to have emerged in the post Cold War discussions about human security (Aggestam 2000: 19, 21; Dalby 2002: 95). Up until mid 1990's environmental security was a poorly investigated subject, but in the latter half of the 1990's empirical and theoretical knowledge have increased considerably (Buzan et al 1998: 1-4, 7, 9; Gleditsch 2001: 178; Ronnfeldt, 1997: 473- 474; Theisen 2006: 5; Timura 2001: 105; Ullman 1983, 133).

There is a large corpus of literature debating the content of a widened security concept including environmental degradation, but a uniform definition of “environmental security” is absent (Graeger 1996: 109-110; Timura 2001:105). One understanding of environmental security could be that it “...concerns the maintenance of the local and the planetary biosphere as the essential support system on which all human enterprises depend” where it assumes that humankind is living beyond the carrying capacity of the biosphere and that humankind is responsible for turning the negative development around (Buzan et al 1998: 8, 76, 80-81). An anthropocentric approach with a *human* security dimension is probably most commonly used, where human induced threats towards the biosphere and the planetary system as whole poses existential threats to all, or parts of, the human kind (Buzan et al 1998, 76-77, 79-80; Elliot 2004: 214; Gleditsch 2001: 177-179).³ The primary concern is if environmental degradation poses a threat to national or international security, for example the conflict potential of renewable resource scarcity, but also environmental inequality/distribution, political unrest and environmental migration (Elliot 2004: 201-202).

2.1.1 The “resource scarcity school” and its main antagonists

A vast amount of scientific research has developed and confirmed the neo-Malthusian fears about scarcity in renewable natural resources. However, in reality, empirical evidence is not so clear cut, and, arguably, the discourse suffers from methodological problems.⁴ There is a

³ There are other possible dimensions in the environmental security concept. One concerns non human induced threats towards human kind caused by natural catastrophes, such as earthquakes and one concerns human induced threats towards the biosphere and planetary system as a whole that poses threats towards other species than human kind. The latter one, regarding threats towards other species than humans, stresses the importance to secure the environment per se (the environment is threatened) and views environmental degradation equally serious as other military threats (for example potential resource scarcity induced violent conflicts). In this study the anthropocentric dimension is used.

⁴ The resource scarcity school receive critic for being anecdotal, causal relationship vague, choosing cases on the dependent variable etc.

continuous debate between advocates of scarcity (often called neo-Malthusians) and advocates of abundance (often called Cornucopians) regarding the state of renewable natural resources.

The core of the resource scarcity school is the concern for how scarcity of renewable natural resources⁵ acts as constraints on human behaviour and may lead, or at least contribute, to insecurity (for example violent conflicts) (Andersson Scott et al 2007: 15; Gleditsch 2001: 178; Homer-Dixon 1999: 47-48; Kahl 1998: 80; Matthew 2008: 4; Theisen 2006: 8). Large-scale warfare over renewable natural resources is considered to be small, but the resource scarcity school uphold that renewable resource scarcity could play a significant role in generating and exacerbating violent conflicts (armed) regionally or within countries (Dalby 2002: 96; Gleditsch 2001: 179; Gleick 1998: 571; Homer-Dixon 1999: 47-48, 82-85; Ronnfeldt 1997: 474-476). Scarcity in renewable natural resources resulting from for example climate change, pollution, increased demand or structural factors, could lead to increased competition due to increased grievance (steaming from, for example, marginalisation within societies), but also due to lower labour costs of rebel soldiers in times of scarcity could eventually produce violent conflict (Gleditsch 2001: 179; Gleditsch & Theisen 2006: 3; Matthew 2008: 3). Environmental stresses could coincide with political tension and unjust access to resources and aggravate existing conflicts (Dalby 2002: 97). In this sense, the resource scarcity school accentuate that scarcities of renewable natural resources could produce social negative effects, for example migration and constrained agricultural productivity, which could cause violent conflicts that tend to be “persistent, diffuse and sub-national” (Ehrlich 1996: 216; Homer-Dixon 1994: 39; Homer-Dixon 1999; Matthew 2008). Scarcity and depletion of renewable natural resources have for example been linked to the Rwandan genocide, ethnic clashes in Kenya, the Zapatista rebellion in Chiapas, Mexico, the conflict between Israelis and Palestinians and the civil war in Sudan (Theisen 2006: 1).⁶ In opposite position of the resource scarcity school, Cornucopians argue that there is no noticeable scarcity in renewable natural resources. Even though there could be short-time shortages of renewable natural resource, that could lead to insecurity, over time the marketplace will provide innovations and substitution for the shortages which makes

⁵ Renewable resources are e.g. water, forest, ozone layer and fertile soil. Renewable resources have a stock and a flow. They can also be divided in providing goods (fisheries) and services (stratospheric ozone), even though they could provide both (e.g. forest; provide timber and maintain regional hydrological cycles).

⁶ One theory regarding resources and conflict concern the abundance of for example oil, diamonds and gold. See for example Dalby 2002: 97. It turns the resource scarcity school on its head claiming that violence over resources occurs to control abundant resources. However, environmental change are not a cause in this possible conflicts.

humanity better off than if the short-term scarcity had not occurred at all (Julian 1994; Julian 1996; Lomborg 2001).⁷

The relative importance of the role of renewable resource scarcity and depletion in conflicts remains debated, but the resource scarcity school is emphasised to constitute a focal point of interdisciplinary research efforts. Even though the Cornucopian understanding has gained influence in for example financial ministries and the World Bank, the resource scarcity understanding is reflected upon as a “buzzword” within general discussions concerning international security in the US and Europe. A theoretical assumption is therefore that the neo-Malthusian understanding could be incorporated in security politics, such as the CFSP in the EU (Buzan 1991: 450-451; Dalby 2002: 95-96; Gleditsch & Theisen 2006: 8- 9, 16; Matthew 2008:3; Ronnfeldt 1997: 474, 476-480; Theisen 2006: 1; Timura 2001: 104). Nils Petter Gleditsch upholds that: “I follow standard terminology in talking about ‘environmental security’, but it might have been preferable to talk about ‘resource scarcity’.” (Gleditsch 2001:179) Not only is the resource scarcity school prominent in the scientific research. The World Watch Institute have adopted the view that environmental breakdown, large-scale population movements, rising competition over renewable natural resources are some forces that “are at the core of a number of conflicts” (Renner 2005: 3, 6). And also, the resource scarcity school’s strand of thought has gained support in for example environmental groups, environment ministries and other official bodies (Buzan et al 1998: 73-74; Gleditsch & Theisen 2006: 3-4; Homer-Dixon 1999: 29).

In the next section we address plausible influences on international security politics in brief. Then, epistemic community theory is elaborated to understand how these understandings (with a focus on the resource scarcity school) might have influenced the CFSP in the EU.

2.2 Incorporation of environmental issues in foreign- and security policy

Possible influences on foreign and security policy to incorporate environmental aspects are plentiful. Traditionally, the making of foreign and security policy has been analysed through a neorealist and neoliberal institutional lens. Simplifying somewhat, the foreign and security policy outcome could then be understood as calculations of relative and absolute advantages made by states depending on predefined national interests (for example survival of the state and interdependence) (Aggestam 2000: 24-25).⁸ Environmental issues gaining place in international security politics might be considered an effect of the actual, objective, threat

⁷ The two main understandings within the “resource school”, neo-Malthusianism and Cornucopianism, are fully incorporated and described in the analytical tool used in this study; see the two ideal types in the study design chapter for a detailed explanation of these two strands of thoughts. See section 3.3 for a presentation of the two ideal types.

⁸ For a more detailed discussion on neorealism and neoliberal institutionalism see for example Nye 1998

environmental issues constitute toward international security (Barkdull & Harris 2002: 7; Berlin & Möller 2005: 2-3). Also, member states in the EU could be conditioned by domestic interests or that a decision could be electorally challenging. However, a constructivistic approach could challenge the analytical attention given to national states interests to explain environmental issues salience in security politics. In contrast to neorealism and neoliberal institutionalism, constructivists accentuate that state interests are not “written in stone” and that state interests could be shaped and changed by surrounding conditions. In relation to this thesis, incorporation of environmental issues in foreign and security policy that might not only be influenced by member states in the EU or as a response to “objective” threats to national states interests (Berlin & Möller 2005: 15f; Boehmer-Christiansen 1996: 174).

The Copenhagen school is a critical constructivistic approach and argues that there is no self evident link between the objective substances of threat images and political agendas. With a *securitisation* process the Copenhagen school strives to illustrate that environmental issues could receive security status through an intersubjective process. The first step in the securitisation process is for an issue to be defined as an existential threat towards a referent object (for example the EU). Talking about environment in security terms refers to a “security move” or a “speech act” and is a rhetoric that stresses the urgency of an issue, that survival is at stake and if action is not taken to solve a situation it will be too late. The second step is when the rhetoric surrounding an issue gain broader acceptance and extraordinary measures to solve the situation are taken, or at least could be taken.⁹ The Copenhagen school argues that there could be hidden motives for wanting an issue to be a security issue. If securitised, the environment receives prioritised status in comparison to other political issues which could opens for actions otherwise not acceptable (Berlin & Möller 2005: 18f; Buzan et al 1998: 24, 30; Eriksson & Noren 2002).

Even though neorealism and neoliberal institutionalism shed light on and provide insight of international environmental cooperation and the dynamics in the international anarchic system, the theories lack ability to explain the sources of national interests or international institutions under conditions of uncertainty (Adler & Haas 1992; Nye 1988: 248). Environmental security could be understood as one area of uncertainty for decision-makers, at least when turning to the scientific debate outlined above, and Adler and Haas (1992) argue that epistemic community theory allow a different approach than “rational

⁹ Anxiety of the unknown leads to an experience of an uncontrollable situation. Together with how an issue is framed (urgent matter that must be given priority in comparison to other political issues) could have an impact on if an issue receives international security status. Eriksson & Noren accentuate that cognition (fear of the uncertain) and the politics of framing an issue (securitisation) are two factors necessary (but not sufficient) factors in the search for an explanation of why an issue is salient as a security issue. In this sense, security politics is an intersubjective process and contains an objective and subjective sense of what is actually threatening and what is perceived as threatening. See Eriksson & Noren 2002 and Buzan et al 1998.

choice and reflective institutionalism” to explain sources of interest and international institutions, such as the EU.¹⁰ The study of epistemic communities and their impact on policy making could illuminate dynamics between the international structure and the choices of decision makers (Adler & Haas 1992: 367-369) and is arguably challenging to, or at least complementing, conventional international relations theories due to its knowledge based arguments (Dunlop 2000; Eriksson & Noren 2002: 16-17; Legro & Moravcsik 1999: 53).¹¹

The Copenhagen school uphold that the strategy to talk about environmental issues in security terms (the logic of securitisation) is increasingly used by “environmental actors”. Non-state actors participating in international policy making *independent of any national government or intergovernmental organization* (Betsil et al 2008: 4, Christensen 2006: 28), such as epistemic communities within the environment and security debate could be advocating securitization of environmental issues. For example, that renewable natural resources possibly are getting scarcer could be addressed in security terms to bring higher attention to the issue. Still, different non-state actors, not only epistemic communities, might matter in international environmental negotiations due to uncertainty encompassing environmental issues (Betsill & Corell 2008; Sebenius 1992: 325; Toke 1999). Epistemic communities could face problems of expanding scientific information to decision makers (Sebenius 1992: 325, 364-365) and environmental nongovernmental organisations could also push for environmental issues to receive security status, for example be “bearers” of a scientific understanding of environmental security. Gough & Shackley (2002: 332) argue that, to receive political attention epistemic communities and other non-state actors, such as Environmental Non-Governmental Organisations (ENGO), could work in combination. However, scientific knowledge is argued to play a significant role in addressing the problems of policy uncertainty that EU arguably faces in areas such as the environment (Zito 2001: 474). Epistemic communities, with political empowerment deriving from e.g. their ability to translate consensual “authoritative” information into policy, and retraction if confronted by anomalous data, makes it compelling to focus on epistemic communities when examine international *security* politics (Dunlop 2000: 141-142; Howorth 2004: 229; Haas 1992: 55; Zito 2001: 466).¹² The dynamics of epistemic communities are further discussed in the next to sections.

¹⁰ Epistemic community theory is elaborated in detail in the next section.

¹¹ Epistemic communities could help constitute a “world order”, but whether or not depends *also* on the extent to which the world order also is based on shared values, rather than individual state interests. See Adler & Haas 1992: 389.

¹² Eriksson and Noren (2002) outline other possible influences. Dramatic events could possibly affect an issues salience as a security issue, but it could also downplay its priority. Also the media is downplayed in this model over possible influences on the salience of security issues.

2.2.1 Epistemic community theory

Epistemic community theory is arguably revealing a new political dimension due to epistemic community's ability to persuade decision makers to conform to its consensual, knowledge driven, ideas without requiring more material forms of power (Adler & Haas 1992:388; Sebenius 1992: 325; Zito 2001: 466). Without awarding epistemic communities a monopolistic position for influencing decision makers over other non-state actors such as ENGO:s, Haas points out that diffusion of new ideas and information provided by epistemic communities can be an important "determinant of international policy coordination" (Adler & Haas 1992: 373, 383, 389-390; Dunlop 2000:139).

Understood as a "non-state actor", epistemic communities¹³ have expertise in a relevant issue area to decision makers, here in an international context, and participate in international policy-making *independent of any national government or intergovernmental organization* (Betsil et al 2008: 4, Christensen 2006: 285). Epistemic communities are emphasised to have potential influence on foreign and security policy by framing issues, diffusing and promoting new ideas (Zito 2001: 466) and to make a distinction from other non-state actors, Haas lays out a four step definition: "...a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area...from a variety of disciplines and backgrounds, they have (1) a shared set of normative and principled beliefs, which provide a value-based rationale for the social action of community members; (2) shared causal beliefs, which are derived from their analysis of practices leading or contributing to a central set of problems in their domain and which then serve as the basis for elucidating the multiple linkages between possible policy actions and desired outcomes; (3) shared notions of validity that is, intersubjective, internally defined criteria for weighing and validating knowledge in the domain of their expertise; and (4) a common policy enterprise-that is, a set of common practices associated with a set of problems to which their professional competence is directed, presumably out of the conviction that human welfare will be enhanced as a consequence." (Haas 1992: 3)

An epistemic community shares a common "interpretation of the science behind a problem and the broad policy and political requirements in response to it" (Dunlop 2000: 140). However, information provided by epistemic communities is not "objective"; rather a product of human interpretations of social and physical phenomena which indicates that

¹³ To exemplify Haas (1992) draws an example to with economists. Economists as a whole constitute a profession, while members of a particular subgroup of economists (for example Keynesians) may constitute an epistemic community of their own and systematically contribute to a concrete set of projects informed by their preferred understandings. An epistemic community can be of various sizes, but it should be in consensus (even though members may engage in internal and often intense debates).

science is influenced by expectations and personal judgments of facts (Chalmers 1999: 12; Haas 1992: 4). Yet, epistemic community theory assumes that decision makers are receptive to epistemic community's information. Increasingly complex issues make decision makers *more receptive* in order to inform their choices and policies with "authoritative knowledge" which decision makers need (Barkdull & Harris 2002:84; Dunlop 2000:140; Chalmers 1999: 24-26; Zito 2001: 466). Of course, as points of critic, epistemic communities could be driving their ideas to receive further funding and recognition. Epistemic communities are also criticized for undervaluing the role of informed politicians and that the decision makers could be selective by choosing epistemic communities information to motivate a decision instead of informing it, use the uncertainty in science to invite delay not action (Boehmer-Christiansen 1996:174-175, 191; Dunlop 2000: 141; Zito 2001:467). But still, the evaluation of threats within a timeframe that stretches beyond the generations of today lead to a unique form of dependence of academic authority and epistemic communities might be able to frame an issue and help define decision-makers interests (Adler & Haas 1992: 373; Buzan et al 1998:71-72). For example, when scientific institutions began to seek active involvement in policy making regarding climate change, it was one factor that helped bringing world political salience of the issue (Boehmer-Christiansen 1996: 178). Even though the political agenda could be shaped by short term-based influences, the overlap between science and policy outcome should be present. Buzan et al point out the *growing power of epistemic communities*, for example due to their transnational character and accessibility for decision makers (Buzan et al 1998:73; Gough & Shackley 2002: 332).

Adler and Haas (1992) advocate that epistemic communities could exert influence on decision makers in the policy process, by innovation and diffusion.¹⁴ Policy innovation refers to framing the range of political controversy surrounding an issue. Epistemic community could, by framing the context, offering expert advice and consultation, influence policy makers expectations and behavior (Adler & Haas 1992: 375-378).¹⁵ Policy diffusion refers to communication of the information provided by epistemic communities. Without international communication (for example conferences) new ideas and policy innovations would remain confined to the scientific group. This implies that is not only the content of information that creates influence, but also epistemic community activities aiming to disseminate information (scientific expertise) transnational (Adler and Haas 1992: 380-381).¹⁶ Betsil and Corell

¹⁴ Also two other steps are mentioned, policy selection and policy persistence, but these first to steps (innovation and diffusion) is more relevant here because the other steps concern more implementation of a policy rather than the inclusion of it.

¹⁵ In this study the controversy could be understood as environmental security, and what is investigated influenced is the CFSP outcome.

¹⁶ In this thesis epistemic communities that share the neo-Malthusian view (resource scarcity school) are of interest.

(2008) argue that influence is based both on participation in the policy process, but also that the participation in the policy process has an effect on the actual policy outcome. “Influence occurs *when one actor intentionally communicates to another so as to alter the latter’s behaviour from what would have occurred otherwise*” This definition emphasises *communication*, for example participation via submitting information to negotiators, giving technical information and claiming legitimacy. Participation is, however, not enough. The definition also includes a focus on the *effect* of participation, if the participation was successful in shaping the political outcome. Epistemic communities influence decision-makers through communication, where communication and action are intermeshed (see Adler & Haas 1992: 389, Betsill & Corell 2008: 24, 26-27). Epistemic communities could influence one national member state of the EU and then its influence is the function of that state’s influence over other member states, but other actors than merely states such as institutions in the EU could also take notice of epistemic community information (Adler & Haas 1992: 378; Zito 2001: 467). Epistemic community theory also seems to assume that decision-makers actively are searching for the information provided by epistemic communities (in certain areas) which then enhances the diffusion. To have influence on policy, epistemic communities do not have to be large, but researchers need to be respected in their own disciplines and consensus could be helpful (Eriksson & Noren 2002: 16). Also it is easier to gain influence where the cost of obtaining the relevant information is high and where there is an intense and vital debate concerning the policy issue. Political debates are more likely to dominate in difficult political areas while in less divisive issue areas, bureaucratic policy makers are more likely to rely on status quo solution and operational goals contained within their own organisation (Zito 2001: 467). In the next section epistemic communities influence on foreign and security policy is outlined.

2.2.2 Epistemic community theory’s influence on foreign and security policy

What plausible links are there between epistemic communities and foreign and security policy in particular? It is argued that epistemic communities could influence policy, even though foreign and security policy that has been considered immune to such forces (Howorth 2004: 229). Sugden (2006) uphold that epistemic communities have proven to contribute to security sector reform in the United Kingdom by offering a “holistic approach” to security sector governance. Identifying included experts (and also excluded) and to establish a causal link between cognitive influence and actual policy change is considered a demanding research task, but even though Sugden argue that epistemic community theory is important to understand policy change, also in security politics (Sugden 2006: 9, 16).

Foreign and security matters might include policy styles or closely held beliefs might not allow an epistemic community to diverge strongly from, in this study, the EU's interests. Epistemic community could be conditioned by international structural realities (Nugent 2006: 504; Zito 2001: 467). On the one hand the CFSP in the EU is not seldom perceived to be an intergovernmental negotiation issue area, associated with the essence of national sovereignty, where scientific knowledge might be downplayed if epistemic communities do not manage to influence a member state (or several member states) that can bring the understandings into the CFSP (Zito 469). But on the other hand, without exaggerating, the CFSP is also described as a political area of increasingly supranational character. This could indicate that epistemic communities could influence not only via member states (Nugent 2006, 504f; Smith 2004: 740; Tonra & Christiansen 2004: 1).

As mentioned above, the end of the Cold War triggered a search for a more broad security concept to include environmental issues. The resource scarcity school as an epistemic community in the environmental security field (possibly also other understandings such as Cornucopianism) could therefore have been advantageous informing foreign and security policies (Haas 1992). New developments accelerate the diffusion process. It lends urgency to reevaluating current policies and to seeking alternatives. The emergence of environmental security research findings within the resource school in particular and the possible explanatory power of epistemic communities to could help understand why environmental issues are appearing in international security politics (Adler & Haas 1992: 380-381, Timura 2001: 104).

2.3 Limitations

Regarding spatial limitation, to disentangle the possible effects of epistemic communities from those of, for example ENGOs, which also put effort into influencing international environmental policy is beyond the scope of this thesis. The center of attention is epistemic communities. Due to its centrality in the environmental security debate *only* the possible influence of epistemic communities within the *resource scarcity school*, on the CFSP in the EU outcome, is examined. Possible epistemic community influence via member states in the EU is also left outside the coverage of this thesis (even though, surely interesting tasks).

Time is limited according to the recent acknowledgement of environment aspects in relation to the CFSP in the EU. Thoughts about a united EU, how to overcome anarchy in the system has been present. But it was not until the end of the 1990s (with the Maastricht treaty) that discussions of integrated security politics took place (Aggestam 2000: 38, 40; Nugent 2006: 352) Up until the late 1990's the EU had no military component at all and it was not

until 2003 that a security strategy developed in the EU (The Council 2008a). Therefore, 2003 to 2008 is time reference in this thesis (comparison over time is *not* an ambition).

3. Study design

Betsill and Corell (2008) provide a comprehensive analytical framework for assessing non-state actor influence on international environmental negotiations. This thesis could be understood as a “light version” of their framework. Betsill and Corell argue that influence is divided in two *related* parts; participation in the policy process and effect on the policy outcome (correlation). By collecting data regarding participation and correlation, Betsill and Corell measure influence on a three degree scale; low (only participation), moderate (participation with effect on the negotiating process) and high influence (participation with effect on both the negotiating process and the actual outcome). Due to lack of time, but also because of difficulties finding information, the moderate level is excluded in this study. Here, the importance is if epistemic community understandings correlate with CFSP outcome, and if participation is verified to be linked with this correlation. To lower arbitrary estimations of “high or low” influence a point of reference could be used (Esaiasson et al 2007: 169-171). Betsill and Corell’s framework provides a reference point for this study; influence is low when epistemic community *only* participated in the CFSP process, for example via conferences and hearings. Influence is high when epistemic community understandings correlates with the CFSP outcome, when participation of epistemic communities with this view is verified to have shaped, at least to some extent, the CFSP outcome *and* when the participation verified in the interviews could be confirmed by other documents or research.¹⁷

The chapter’s first step is to examine plausible correlation between the resource scarcity school (the independent variable) and the CFSP outcome (the dependent variable). This is a necessity for the second step; to understand if epistemic communities (within the resource scarcity school strand of thought) participation in the CFSP process can explain the possible CFSP outcome.

3.1 Descriptive text analysis to measure influence in policy outcome

One commonly used method, when investigating influence of science on policy, is to compare “understandings” of the non-state actor with the political outcome (Adler & Haas 1992; Haas 1992; Yee 1996: 77). A text analysis is used to describe and systemize the

¹⁷ One different approach to lower arbitrary estimations might be to compare the CFSP in the EU with for example the African Union. But this is also a rather broad approach considering the material for the text analysis and from the informant interviews on two cases would increase noticeable. To draw conclusions regarding high influence constitute of three elements (verified participation, verified links and by me confirmation that the non-state actors mentioned as epistemic communities could be thought of being epistemic communities looking at the definition outlined earlier in this study). Only interviews make it difficult to draw conclusion of high influence.

content of the dependent variable, the *CFSP outcome* (Esaiasson et al 2007: 239-240). It is an important part in trying to determine influence of epistemic community on politics, but reveals nothing of possible mechanisms of causality (Betsil and Corell 2008: 71).

3.1.1 Analytical tool

The created tool encompasses two polarised ideal types taken from two main conflicting, opponent, theories in the “resource school” realm; neo-Malthusianism and Cornucopianism (Gleditsch 2001:187; Homer-Dixon 1999: 34). The neo-Malthusian ideal type incorporates the resource scarcity school’s understandings and Cornucopianism is brought in to the analysis as an opposite ideal type to have a point of comparison. When examine if the neo-Malthusian theory can be found in the CFSP or not, the Cornucopian ideal type is used as a “counterbalance” to realize if it is instead the opposite view that gained influence. The essence of the ideal types is presented in *two* levels: view of the present and view of the future regarding the relationship between renewable natural resources (environment) and violent conflict (security).¹⁸ Possible correlative features and similarities (or absence of them) should be found when comparing the CFSP outcome with the two ideal types (Esaiasson et al 2007: 159).

The ideal types should be mutual exclusive (clear difference between them). The chosen theories should capture the essence of the “resource school’s” main arguments and be fully covered (presumed to cover possible aspects of the phenomena in the issue-area studied).¹⁹ Further, they should also be parallel (one feature on in one ideal has an opposite in the other) (Esaiasson et al 2007: 156f, 161-162). The analytical tool does not rely on a former analytical tool. Unfortunately other analytical tools, to depart from and develop further, were not found. The process of developing the analytical tool has been dedicated to defining proper contrasting characteristics of the two ideal types, rooted in the two theories, to help the realization and validity of the investigation.

The two ideal types are only a help to understand how the EU incorporates environment in the CFSP (extreme pictures of a phenomenon and can not be found in their pure form in reality) (Esaiasson et al 2007: 158). A predefined approach is preferable because

¹⁸ When creating the tool one more level was considered: solutions. This could bring a more nuanced analysis. For the purpose of the text analysis, to measure correlation between the neo-Malthusian ideal type and the CFSP outcome, this third level is not necessary. The essence of the two theories could be considered integrated in the tool (if renewable resources imply violent conflicts due to scarcity and if this is considered to worsen over time).

¹⁹ There are especially one more theory that could be included in the analytical tool; resource abundance theory regarding for example diamonds, gold and oil. This theory is excluded in this study because renewable natural resources are in focus. This could be thought to be closer attached to the “necessary” environmental needs, basic needs in contrast to “luxury” natural resources such as gold and diamonds. Also, as mentioned above, this theory does not include environmental change. See for example Gleditsch and Nordås 2007, de Soysa 2002 and Dalby 2002.

it allows independence from the text itself. For this study it would be inappropriate with an open approach for the reason that it would eliminate the possibility to find a possible correlation between the “resource scarcity school” and the CFSP outcome. A predefined tool also facilitates motivation of conclusions, presenting the result and focusing on the thesis purpose (Esaiasson et al 2007: 244f). The ideal types are presented in section 3.3 and the analytical scheme (Table 1) is outlined in section 3.4.

3.1.2 Criteria’s for conclusions regarding influence on outcome

If the resource scarcity school’s understanding and the understanding embedded in CFSP outcome regarding natural resources are similar (closer to the neo-Malthusian ideal type) claims of correlation could be made. Epistemic community theory could be conditioned by structural realities which could make it difficult to see a possible correlation. Similarity must not be in exact term, but the essence should be present (Betsil & Corell 2008:27). The analytical tool should also help determine if the neo-Malthusian view isn’t present, the Cornucopian ideal type is used to understand if it is rather the opposite view that correlates.

The results will be stipulated and depend on my interpretations and judgments of the material. However, ideal types with good theoretical connection could reduce some of my influence. I strive to clearly describe the criteria’s for conclusions, to address the material objectively and present a fair picture given the analytical tool. The two ideal types, instead of just one, also make conclusion motivations and sorting formulations in the material easier (Esaiasson et al 2007: 158). The result is presented and estimated in terms of “closer” or “far from” an ideal type instead of “more” or “less”. I should be careful trying to determine that one ideal type is brought up *more* than the other (Esaiasson et al 2007: 160) and also be aware of the difficulty to decide when natural resources *are* important and when they *could* be of importance to generate violent conflict. A scale for guidance is used for conclusions (see analytical scheme Table 1).

Interpretation- and boundary establishment is a challenge (Esaiasson et al 2007: 254). This is addressed by openly discussing in which “box” in the analytical tool a “CFSP-statement” is placed.²⁰ A clear distinction between the content of the original text and my own analysis is important (Esaiasson et al 2007: 253). The result will be presented in citations (in italic), motivated conclusions and short summaries.

²⁰ A friend (political science student) has also analysed difficult “CFSP-statements”. Independent of mine interpretation CFSP statements was place in the same place in the analytical tool, which increases the reliability of the text analysis.

3.1.3 Material for text analysis

The material decision is a critical step in the thesis and should be chosen with caution. A preceding step is to identify the idea carrier (Esaiaasson et al 2007: 246-249). The material should express how the EU incorporates environmental aspects in the CFSP outcome. The CFSP is mostly an intergovernmental policy issue. The Council of Ministers (the Council) is considered *the very heart* of the CFSP negotiation (Nugent & Paterson 2006: 505; Hayes-Renshaw & Wallace 2006: 1), but since 1992 the European Commission (the Commission) is considered to be fully associated with the work carried out in the CFSP²¹ (Nugent & Paterson 2006: 509). Hence, material is taken from the Council and the Commission.²² A wide idea carrier brings sufficient material to the analysis and incorporates the “cooperation” between the Commission and the Council in CFSP matters. Even though two different institutions might have different ways of working with CFSP issues the overall picture is important. To exclude one would be to exclude an important input to the CFSP. The text analysis uses two documents; the *European Security Strategy* (ESS) elaborated by the Council and the joint report *Climate Change and International Security* (CCIS) from the Commission and the Council’s High Representative.²³ The contemporary security concerns of the EU are mainly manifesting in the ESS from 2003 (Bremberg & Britz 2007) and the report CCIS from 2008 describes how environmental aspects are incorporated in the CFSP outcome (The Council 2008c). This could illustrate security politics in the EU in a broad sense (Aggestam 2000:40). Two central documents to express the CFSP outcome regarding how the EU incorporates environmental aspects are also preferable in the informant interviews that goes deeper in explaining the CFSP outcome (see section 3.2.1).²⁴ Also, there was not a broad material to choose from regarding environmental aspects in the CFSP in the EU.

3.2 Interviews to measure influence by participation

The thesis second question addresses if epistemic community participation in the CFSP negotiation can help explain the CFSP outcome (the two documents) and if the link between possible participation and outcome is verified. There is a presumption that epistemic community may have played a causal role in influencing policy outcome if correlation is present, but to spot a causal connection (if epistemic communities actually caused the effects

²¹ The Commission has a coordinating role, can make proposals in CFSP matters and between the Council’s High Representative and the Commissioner for foreign affairs there are close cooperation.

²² The so called hidden agenda is difficult to determine and study because of low availability of empirical material. It is also not necessary in this thesis. The material is taken from the official agenda of the EU. See Eriksson & Noren 2002 for a discussion of the closed and open political agenda.

²³ The High Representative of the CFSP is responsible for initiating, implementing the politics of CFSP in the Council. Both documents are adopted by the Council and could therefore be argued to be an important part of the CFSP outcome.

²⁴ Articles and statements about environmental issues in the CFSP could be fruitful for the descriptive purpose, but for the second step in the thesis it is not preferable.

in the outcome) is complex (Yee 70-71, 76; Adler & Haas 1992: 387; Betsill & Corell 2008). Therefore, influence should include participation and if this participation is linked to the possible outcome correlation (Betsil & Corell 2008).

Under complicated circumstances to obtain information and when complexity regarding a causality link is high interviews could be used (Esaiasson et al 2007: 287). Epistemic community participation could be examined by reviewing the CFSP process and identifying epistemic communities' participation in the policy process (which actors participated in conferences, hearings etc). But in this study, interviews are more accessible and could be a first step to receive information of *perceived* epistemic community participation in the CFSP process (Dunlop 2000: 140; Sugden 2006).²⁵ The CFSP process could also be considered a closed issue area in the EU which would risk not receiving material if relying on for example document studies of possible epistemic community participation.

3.2.1 Interview guidance

Informant interviews should answer if epistemic communities (within the resource school strand of thought) participated in the CFSP process. If the correlation was present in the text analysis, interviews also should address if the possible participation is thought to be linked to the CFSP outcome. Verifying linkages concerns if the outcome would have been different if epistemic communities didn't participate and if it was epistemic communities that actually brought an understanding into the CFSP outcome.²⁶ The interview guide, with short and simple questions (see Appendix 1), helps conduct interviews. It is important that both themes (participation and linkages) receive attention in the conversation (Esaiasson 2007: 258, 298f). The questions have a theoretical approach and also derive from the text analysis result.²⁷

Interview participants are selected in line with the principle of intensity, centrality. And the participants are considered strategic "expert" within the CFSP process and could be used as sources (Esaiasson et al 2007: 257, 261, 291). Employees at the Commission and the

²⁵ Measurement of epistemic community influence via member states (multilevel approach) is not included, which is a lack of this study (e.g. influence via the presidency is not provided), but as mentioned above the CFSP process is not strictly intergovernmental and it could be possible to examine *direct* participation on decision-makers at the Commission and the Council via informant interviews. Sugden (2006), Haas (1992) and Zito (2001) also uphold that epistemic community theory is applicable not only on domestic level, but also on an international level. Furthermore, epistemic community theory assumes that decision-makers and epistemic community are "drawn" to each other (the first one seeking information, the latter providing it) which could further motivate the possibility of measuring epistemic community participation via the Commission and the Council.

²⁶ By Betsill and Corell (2008) this is called "process tracing" and "counter factual control" and is important to understand if it actually was participation by a certain actor than affected a certain political outcome.

²⁷ The interview guide does not cover other explanations than non-state actors (where epistemic communities are in focus). Other explanations are possible, and surely interesting, but it is beyond the scope of this study.

Council, that have been working with, preparing and formulating the ESS and the CCIS, could provide information if epistemic communities within the resource scarcity school participated in the CFSP process, and, depending on the first step, if epistemic community participation is linked to the CFSP outcome.²⁸ Even though there are some difficulties associated with informant interviews, for example that participants reject to reveal informal contacts with epistemic communities and that participants might not have enough information, interviews is one first step in examine participation of epistemic community in the CFSP (which is considered to be a rather closed issue area). Using informant interviews, there is also a potential problem of not having enough interview participants. It is hard to replace participants (Esaiasson et al 2007: 295) and therefore an anonymous procedure was promised.²⁹ A thesis description together with a request of participating in an interview was sent, via email, to possible participants to make the first contact (see Appendix 2). In this thesis, three interviews were conducted over the phone (in English), due to lack of time and financial resources (travel costs). This could have troubled the reliability, for example because of misunderstandings, language barriers and stress in the conversation (Esaiasson et al 2007: 70).³⁰ All three of the interview participants were involved in writing the CCIS report, and one of the interview participants also had experience from the ESS.³¹ A finished version of the thesis is sent to the interview participants.

3.2.2 Criteria's for conclusions of the second part

Analysing the interview results the point of reference in this study provided by Betsill and Corell is used. Influence is low when epistemic community *only* participated in the CFSP process, for example via conferences and hearings. Influence is high when epistemic community understandings correlates with the CFSP outcome, when participation of epistemic communities with the resource scarcity school is verified to have shaped, at least to some extent, the CFSP outcome *and* when the participation verified in the interviews could be confirmed by other documents or research. If epistemic community theory is useful as a “new political dimension”, the interviews should at least mention epistemic communities’

²⁸ Here, the interest is the process, if epistemic communities were present or not (and if there is a linkage to the CFSP outcome), therefore the interviews are of informant character. The interest is *not* gaining understanding of the interview participants “conceptions” and “general thoughts” of epistemic communities in the CFSP outcome.

²⁹ This was also the wish of the interview participants. They can be understood as expressing the “voice” of the Council or the Commission and did not feel that their names were necessary.

³⁰ A test interview was conducted before the actual interviews. Still, testing the interview guide on a friend is not the same as testing it on a person in “similar” position as the interviews participants. But the test interview might have provided better fluency and ease in the conversation to ensure reliability somewhat more.

³¹ When searching for interview participants by calling different units at the Council and General Directorates at the Commission I found that the three interview participants were the most relevant to interview (because they were always referred to by others working in the Council or the Commission).

presence in the CFSP process.³² One difficulty could be to measure epistemic communities in the interviews; do interview participants have the same understanding of epistemic communities used in this thesis? Still, indicators such as scientific communities, single scientists, academic communities, academic experts, scientific bodies and scientific institutions could be reasonable indicators of epistemic communities given that the interviews are conducted the clear and thorough way mentioned above.³³ Epistemic communities' participation could be considered not to be verified if non-state actors are considered excluded from the CFSP process, but also if other non-state actors are pointed out as participation and shaping the CFSP outcome instead of epistemic communities.

Probably the interviews, to some extent, could be suffering from unwanted effects in the conversation. Interview participants might be keen to answer a question that they have never thought about and the answers could also depend on who is asking the questions (Esaiasson et al 2007: 265-266, 301). I strive to discuss openly if I believe that the result is affected by the interview situation.

Informant interviews, as a method, advise reflection over reliability of the narratives (Esaiasson 2007: 303). Narratives from the interviews could be understood as primary sources. Interview participants are answering about courses of events that they have experienced in their CFSP related work during the "preparation" of the two documents. The distance between the narrator and the narrative could be considered close in time, at least with regard to the CCIS (2008). However, with regard to the independence of the narrative, it is difficult to know if "possible expectations" affect the participant's answers. Even though interview participants come from different institutions in the EU, they are argued to be in close cooperation. Also, the tendency of the narrators is hard to determine. If the interviews give information regarding a scientific group participation in the CFSP process, I will try to find confirming narratives with different origin, for example search for other confirming documentation. This could make the results more reliable.

3.2.3 To generalise the results?

In this study only one case is examined. Could the study generalise to other contexts other than the EU? Due to the time and spatial limits in the thesis there are small claims on generalizing the result to other international organisations such as the African Union. More

³² Epistemic communities are one possible explanatory factor examined in this thesis. Yet, other diverse explanatory factors might arise in the interviews (e.g. other non-state actors). These will be briefly mentioned in the result – but the focus is still on if epistemic communities within the resource scarcity school were participating or not and if this could have been linked to the CFSP outcome. A review of mentioned non-state actors will therefore focus on epistemic communities.

³³ Even though it could be difficult to outline if a mentioned epistemic community fulfil the definition in the thesis, at least we could try to discuss if the mentioned epistemic community could relate to the epistemic community definition in this thesis.

studies must be conducted to enable broader generalizations. For this, the analytical tool could be considered universal to validate the results in other contexts.

3.3 Presentation of the ideal types

3.3.1 Neo-Malthusianism

Environmental scarcity has insidious and cumulative social impacts, such as population movement, economic decline, and the weakening of states. These can contribute to diffuse and persistent sub-national violence. The rate and extent of such conflicts will increase as scarcities worsen (Homer-Dixon 1994: 36).

With origin in Thomas Malthus (Malthusianism) limits of growth theory, supported mainly among ecologists or biologist, neo-Malthusianism emphasises Earth's physical limits (Ehrlich 1996: 216; Myers and Julian 1994: xiii, 127; Homer-Dixon 1999: 28, 43; Ayers 1993: 189). In the 1990's neo-Malthusianism (the resource scarcity school) developed to integrate distributional aspects (de Soysa 2002; Gleditsch 2001; Urdal 2005) and coined the term "environmental scarcity" which includes three components; *supply*, *demand* and *structural* induced scarcity (Homer-Dixon 1991; Homer-Dixon 1994; Homer-Dixon 1999: 49-52, 177). *The supply induces scarcity* refers to physical availability of renewable natural resources. Neo-Malthusians argue that causal relationships within environmental systems to be sharply nonlinear mathematical functions (exhibit threshold effects); environmental systems could answer incrementally and slow to human intervention for a long time and then suddenly change character (Homer-Dixon 1999: 37).³⁴ Important environmental factors are for example extreme events (for example global warming might result in crop-devastating droughts), ramifying character of scarcities in interdependent environmental systems and interaction among human impacts on these systems (for example over extraction in one area can affect surrounding ecological systems and synergistic outcomes). It is uncertain when Earth might reach a threshold with complex, unpredicted and perhaps highly undesirable outcomes (Homer Dixon 1999: 40-41). Neo-Malthusians argue that life-support systems of civilization are being pushed closer to their limits and that environmental damage could become irreversible, for example ozone depletion and climate change potential to destabilize civilization's life-support system and declining resources such as cropland, forest, water and fish (Ehrlich & Ehrlich 1996: 216). The ecosystem characteristics could imply that societies

³⁴ Ecosystems is much more vulnerable than they once was regarded being. The Torontogroup argues that twenty thirty years ago ecosystems were regarded stable and resilient.

must be able to supply more social and technical ingenuity³⁵ to adapt to rising environmental scarcity (Homer-Dixon 1999: 43-44, 179; Kahl 1998: 80-81). *Demand induced scarcity* refers to population size and per capita demand. For example a boost in demand speeds demand induced scarcity and decrease availability of renewable natural resources. Consumption and population growth, according to neo-Malthusians, could be important factors in environmental deterioration and conflict (Ehrlich 1996: 216; Ehrlich et al 1993: 1-2; Dimond 2006: 312-313). *Structural induced scarcity* refers to relative access to resources of different groups and unequal distribution that concentrates a resource for some groups which subject other groups in greater average scarcity. These three sources to scarcity (singly or in combination) could produce negative social effects (constrained agricultural productivity, constrained economic productivity, migration of people searching a better life, disruption of institutions (for example governments), insurgency and ethnic clashes) which could generate violent conflicts (commonly ethnic clashes and civil strife). The Toronto group expect environmental scarcity to become more influential in coming decades; more fragile ecosystems, increased population and extensive consumption (Homer-Dixon 1999: 5, 10-12, 176).

3.3.2 Cornucopianism

There always will be temporary shortages and resource problems where there are strife, political blundering and natural calamities – that is where there are people. But the natural world allows, and the developed worlds promotes through the marketplace, responses to human needs and shortages... (Julian 1996: 588)

Cornucopianism, with main support among neoclassical economists (Myers & Julian 1994: xiii) argue no strict limits to Earth in terms of population and consumerism. In contrast, Cornucopians uphold properly functioning markets (with for example regulating price mechanisms and support from institutions such as property rights) encourage conservation, resource substitution, technology innovation (for example deep sea extraction) and development of new sources of any scarce natural resources (for example via world trade) (Gleditsch 1998: 3; Ayres 1993: 189). Thus, Cornucopians believe natural resource scarcity triggers ingenuity and technological innovations tend to disarm concerns about the negative social effects of scarcity (Matthew 2008: 1). Throughout history, Cornucopians argue, new tools and new knowledge have made natural resources easier to obtain. Simon Julian stresses that in the long run there is no resource scarcity and practical limits to “improving our lot” are nonexistent. However, in the *short run* Cornucopianism uphold that all natural resources

³⁵ “Ideas to solve problem” in a society, and determine how well society adapt to environmental scarcity. Chronic “ingenuity gap”, gap between required ingenuity to solve a problem and supply for ingenuity in the society make countries more vulnerable to the harsh social effects steaming from environmental scarcity.

are limited which could be understood as “shortage crisis” which result in pressure on supply, higher prices and possibly violence (Julian 1996:73, 580-581; Ayres 1993: 192). If people fight over natural resources, Cornucopians mean that is because of political interference with exploration and to avoid local scarcities natural resources must be properly priced and allowed to be traded (Gleditsch & Theisen 2006: 5). Cornucopianism argues that natural resources are getting more available rather than more scarce; short term scarcities forces up prices on natural resources and triggers the search for new supplies and new solutions. New sources and subsidies are eventually found and these discoveries leaves humanity better off than if the shortages had not occurred. A large population influence the production of knowledge (more minds to generate ideas). Thus, people are regarded as a resource in the long run rather than a burden to the environment. Human kind has experienced an unprecedented growth in human prosperity and in the last 40 years everyone, both developed and developing countries, have more access to clean drinking water and people will not run out of food or lose forests (Lomborg 2001: 328-329). The current outlook on the development of global warming does not indicate a catastrophe – technology will solve it. Lomborg argue that it is no imminent fear of environmental breakdown (Lomborg 2001: 331-332).

3.4 Presentation of the analytical scheme

Table 1 – The analytical scheme

	Neo-Malthusianism		Cornucopianism	
View of Present	<p>The EU believes that <i>there are physical limits</i> to population growth and consumerism regarding the maintenance of the planetary biosphere on which human enterprise is depending on.</p> <p>The EU believes that Earth's environment and natural <i>resources are turning scarcer</i> and more polluted. Especially regarding climate change and scarcities in fish, cropland, water and forest (vulnerable ecosystem).</p> <p>The EU believes that environmental scarcity (supply, demand and structural) leads to negative social effects such as constrained agricultural productivity, constrained economic productivity, population movement, segmentation of society, weakening and disruption of institutions, insurgency and ethnic clashes. The EU believes these negative social effects to produce violent conflicts, and threatens international security and peace.</p>		<p>The EU believes that there are <i>few, if any, physical limits</i> to population growth and consumerism regarding the maintenance of the planetary biosphere on which human enterprise is depending on.</p> <p>The EU believes that the Earth's environment and <i>natural resources are turning less scarce</i> and less polluted (resilient ecosystem).</p> <p>The EU believes that resource shortages can occur in a short time scale. Violent conflict could be present due to political interference with exploration. These resource shortages may cause shortage crises that could include violence, but can be avoided by price-setting and trade. However, in the long term there is no scarcity in natural resources due to the capacity of human knowledge (for example technical innovations, substitution of scarce resources etc).</p>	
View of Future	<p>The EU predicts that the state of the ecosystems will continue to worsen in the future, especially with regard to climate change and scarcities in water, cropland, forest and fish.</p> <p>The EU predict that the world, in particular developing countries, face complex, fast-moving and interacting environmental scarcity which can lead to a spiral of violence, institutional dysfunction and social fragmentation which could hinder adaptive institutional and technological innovation. And thus, the EU believes that environmental scarcity induced violence will be frequent in the future and pose a threat to broader regional and world security. The rate and extent of these conflicts are expected to increase.</p>		<p>The EU predicts that the state of the ecosystems will get better in the future. The environment will become cleaner and possess more natural resources. For example Water or cropland will not be scarcer.</p> <p>The EU predicts no imminent threat of environmental scarcity induced conflicts in the future. The EU predicts no increase of environmental scarcity induced conflicts in the future.</p>	
Scale	Close to NM ideal	Closer to NM ideal (more far from C ideal)	Closer to C ideal (more far from NM ideal)	Close to C ideal
For example	Violence induced by environmental degradation will increase in the future.	Violence induced by environmental degradation could increase in the future.	Violence induced by environmental degradation will possibly not increase in the future.	Violence induced by environmental degradation will not increase in the future.
Time	Short time = below a decade			

4. Research findings

Below the result from the text analysis and the informant interviews is presented and analysed. The presentations of the correlation and participation findings are in the end of this chapter merged in a discussion (4.3). Thus, this final result discussion connects the two parts in the thesis (4.1 and 4.2) and shows some of the main difficulties and obstacles with the realisation of the study. The results are related to the point of reference in this study.

4.1 Correlation with the CFSP outcome?

The view of the present and the view of the future are presented separately below followed by a brief summary of the results.

4.1.1 The view of the present

In the material reviewed for this text analysis there is a “logic of environmental scarcity” to be seen. *Firstly*, climate change is thought to be one main factor increasing renewable resource scarcity in for example water, arable land and fish stocks. The role of climate change with regard to renewable natural resource scarcity is clearly mentioned in both the ESS and the CCIS report. In accordance to the analytical scheme (see analytical scheme Table 1) climate change could be viewed as increasing supply induced scarcity. This could refer to a vulnerable ecosystem and that “any” environmental problem could increase resource scarcity: “*climate change will heavily affect Europe’s natural environment...*” (CCIS 2008:3) “*the overall effect is that climate change will fuel existing conflicts over natural resources [arable land, water, food and fish stocks] ...*” (CCIS 2008: 3) “*competition for natural resources - notably water - which will be aggravated by global warming over the next decades*” (ESS 2003: 2-3) and “*... [the EU] recognise the link between global warming and competition for natural resources.*”(CCIS 2008:3) *Second*, a factor that is understood to increase the consequences of climate change is demographic pressure which could be related to demand induced scarcity. According to the analytical scheme (see analytical scheme Table 1) demand induced scarcity is embedded and at least given some support in the material. The statements “*the consequences [of water scarcity] will be even more intense in areas under strong demographic pressure*”(CCIS 2008:3) and “*water stress and loss of agricultural productivity will make it difficult for Asia to feed its growing population...conflicts over remaining resources and unmanaged migration will lead to instability [in that region].*” (CCIS 2008:5) express the role of demand induced scarcity. The statements make assumptions that population increase (by using pressure) will aggravate renewable resource scarcity, or the effects of supply induced scarcity. It could be derived to the belief in physical limits to population growth and consumerism of these renewable natural resources in the neo-

Malthusian ideal type (see analytical scheme Table 1). *Third*, structural induced scarcity is also spotted in the material. It is understood as a factor that increases the consequences of climate change: “*The overall effect is that climate change will fuel existing conflicts over depleting resources, especially where access to those resources is politicised.*” (CCIS 2008:3) and “*the Jordan and Yarmuk rivers are expected to see considerable reduction in their flows affecting Israel, the Palestinian territories and Jordan. Existing tensions over water are almost certain to intensify in this region leading to further political instability.*” (CCIS 2008:5) The actual access to renewable natural resources is thought to contribute to the consequences of supply induced scarcity. Politicised access to already depleting resources could be connected to the distributional aspects in the neo-Malthusian view (see analytical scheme Table 1). Existing tensions over water are understood as intensifying the supply induced scarcity (reduction of water flow) effects. With reference to the analytical scheme (see analytical scheme Table 1) the view of the present assumes that supply, demand and structural induced scarcity could work in combination with each other (or one by one) in accordance to the neo-Malthusian ideal type (see analytical scheme Table 1). The decisions above can illustrate difficult decisions regarding where to place the statements; however, I interpret the statements closer to the neo-Malthusian ideal type, in comparison to the Cornucopian ideal type, also due to the time scale included, which is a crucial distinction between how the two ideal types views the present (see analytical scheme Table 1). In particular one statement above: “*Competition for natural resources, - notably water - which will be aggravated by global warming over the next decades...*” (ESS 2003: 2-3) includes information of time.³⁶ Competition over natural resources is considered to be present over *the next decades*, which could be understood as a long term assessment that move away from the Cornucopian view of the present, that instead considers short run scarcity of natural resources to contribute to violence. The Cornucopian ideal type upholds that “shortages” of renewable natural resources can occur in a short time, but this view of the presence does not correlate with the material regarding this aspect (see analytical scheme Table 1). Also, in contrast to the Cornucopian ideal type there is indicators that natural resources are turning scarcer (see analytical scheme Table 1): “*reduction of arable land, widespread shortage of water, diminishing food and fish stocks, increased flooding and prolonged droughts are already happening in many parts of the world*” (CCIS 2008: 3) together with the statement above “*competition for natural resources...*” (ESS 2003: 2-3) illustrate an association closer to a

³⁶ During the realisation of the text analysis one difficulty was noticeable. It could be difficult to separate the timescale in the view of the present, with the view of the future. However, I believe that the use of time in the view of the present is different from the “view of the future”-level elaborated in section 5.1.2. The view of the present is not how they believe the development with e.g. conflicts to develop, rather how they view the present state of renewable natural resources which needs some kind of analyse of time to separate the two ideal types.

vulnerable ecosystem. The emphasise on *aggravated competition over natural resources* and *diminishing food and fish stocks* implies that the EU believes that renewable natural resources are scarce already and that they are turning scarcer. However, one might oppose to this by noticing that the material no not mention the word “scarcity”. Thus, why not place the statements closer to the Cornucopian view? First, remembering the timeframe is important (again, this is not the same as the “view of the future”-level elaborated in the section 5.1.2). Second, the view could be more far from the Cornucopian view because the material indicates some environmental changes as irreversible: “*unmitigated climate change beyond 2 degrees C will lead to unprecedented security scenarios as it is likely to trigger a number of tipping points that would lead to further accelerated, irreversible, and largely unpredictable climate changes*” (CCIS 2008: 2). Possible *irreversible* climate changes do not correlate well to the Cornucopian view of ecosystems that rather refers to a resilient ecosystem where Earth’s capacity is not declining (see analytical scheme Table 1).

What about social negative effects steaming from the “logic of environmental scarcity”? The EU believes that: “*a drop in agricultural land productivity will lead to, or worsen, food-security in least developed countries, and an unsustainable increase in food prices across the board [due to climate change but also demographic pressure and politicised access]. Water shortage in particular has the potential to cause civil unrest and lead to significant economic losses, even in robust economies.*” (CCIS 2008: 3) These indicated social negative effects such as constrained agricultural and economic productivity are implied by the neo-Malthusian view (see analytical tool Table 1). There is a distinction between developing and developed countries, but the material also indicated that developed countries (my interpretation of robust economies) could be affected by these social negative effects steaming from environmental scarcity. The social negative effects would also be affecting the EU, in for example significant economic losses and increased food prices. This is again a difficult distinction between the ideal types, because it could be interpreted to concern an imperfect market or trade system, which is emphasised by the Cornucopian ideal type (see Table 1). However I interpret it to be more far from the Cornucopian view because the material states that even *robust economies* can be affected. According to the Cornucopian ideal type it is primarily states with weak markets (my interpretation of robust economies) that will, possibly, be affected by shortages in renewable natural resources due to for example an imperfect market (see analytical scheme Table 1). This view could also be illustrated with the following statement: “*Climate change will heavily affect Europe’s natural environment and nearly all sections of society and the economy.*” (CCIS 2008: 3) Following the analytical scheme an assumption that high food prices will be regulate via the market by a “prise mechanism” or “allowance of international trade” is far fetched. This is then closer to the

neo-Malthusian ideal type in comparison to the Cornucopian ideal (see analytical scheme Table 1). Are there other social negative effects to be found in the material? The EU states that “*water stress and loss of agricultural productivity [caused by climate change] leads to unmanaged migration*” (CCIS 2008: 5) and regarding “*environmentally-induced migration*” (CCIS 2008: 4) the EU upholds that “*...the effects of climate change...could amplify or trigger migration within and between countries...there will be millions of ‘environmental’ migrants by 2020...*” (CCIS 2008: 4) and “*migratory pressure at the European Union’s border*” (CCIS 2008: 5) which illustrate that migration is thought to be a social negative steaming from, at least, supply induced scarcity. Other social negative effects from environmental scarcity are weakening of institutions, insurgency and ethnic clashes (see analytical scheme Table 1) and they also receive some support in the material: “*climate change significantly increase instability in weak or failing states by over-stretching the already limited capacity of governments [institutions] to respond effectively to the challenges they face...could trigger frustration, lead to tensions between different ethnic...groups within countries and to political radicalisation* (CCIS 2008: 4).

If environmental scarcity and social negative effects steaming from environmental scarcity produce violent conflicts is not explicit in the material. The word conflict is mentioned “*...climate change will fuel existing conflicts over depleting resources...*” (CCIS 2008: 3) “*Conflicts over remaining resources...*” (CCIS 2008: 5), but *violent* conflict is not mentioned. Still, that a conflict could be violent may possibly be implicit embedded in the material. The statement that “*already today, climate change is having a major impact on the conflict [partly for agricultural land and water] in and around Darfur*” (CCIS 2008: 5) could help determining if the EU could assume violent conflicts to be a result of environmental scarcity and social negative effects. This is a conflict that is estimated as a *violent* conflict because the EU has an ongoing operation in this region which includes a “civilian and a military component” in the ongoing conflict (the Council b; COM Interview 2008b).

4.1.2 The view of the future

Since the EU:s neighbours include some of the most vulnerable regions to climate change, e.g. North Africa and the Middle East, migratory pressure at the European Union’s border and political instability and conflicts could increase in the future (CCIS 2008: 5).

Future is a vague word when comparing the neo-Malthusian and Cornucopian ideal type regarding the view of the future (see analytical scheme). Future could be next month, or it could be in hundred years from when the document was written. The material shows some unclear statements regarding what the EU predicts the future to be, e.g. “*climate change is a*

key element of international relations and will be increasingly so in the coming years". However, other statements help estimate how the EU views the future. Remembering the statement *"competition for natural resources - notably water - which will be aggravated by global warming over the next decades, is likely to create further turbulence and migratory movements in various regions"* (ESS 2003: 2-3) gives some directions on how the EU views the future development (not only the view of the present that was elaborated above). In this sense the EU predicts that competition over natural resources will be *aggravated over the next decades* and that turbulence and migration will increase (however, this is a social negative effect and not an actual violent conflict). Cornucopians would not indicate that competition over natural resources to worsen in the future. If following the analytical tool the Cornucopian ideal type assumes scarcity in the short term, below decades (see analytical scheme Table 1). The view of the future is more far from the Cornucopian ideal type, because the material emphasise that: *"the impact of climate change on international security is not a problem of the future but already of today and one which will stay with us. Even if progress is made in reducing the emissions of greenhouse gases, weather patterns have already changed, global temperatures have already risen...."* (CCIS 2008: 6). The EU also upholds that *"desertification could trigger a vicious circle of degradation, migration and conflicts over territory and borders that threatens the political stability of countries and regions"* (CCIS 2008: 4) and that *"the Nile Delta could be at risk from both sea-level rise and salinisation in agricultural areas while 12-15 % of arable land could be lost through sea-level rise in this century."* (CCIS 2008: 6) The emphasis on *vicious circle* could possibly indicate a development with a more distant "end" than the one proclaimed by the Cornucopian ideal type. Even though vicious circle is a vague statement with regard of time, a longer time frame than decades strengthen the placement of the view of the future closer to the neo-Malthusian view in comparison to the Cornucopian view of the future (see analytical scheme Table 1).

4.1.3 Brief summary of correlation findings

The material points at a direction similar to the neo-Malthusian ideal type (that renewable resource scarcity is present and likely worsens over time). With guidance from the analytical scheme correlation between the neo-Malthusian ideal type and the CFSP outcome is, at least to some extent, visible in comparison with the Cornucopian ideal type. The logic of environmental scarcity could be considered embedded in the material, which is thought to lead to negative social effects for both developed and developing countries. It is also, at least implicitly, mentioned that these social negative effects could lead to instability and violent conflicts that are supposed to increase in the future.

4.2 Participation and linkages to the CFSP outcome?

The data from the informant interviews are presented below. Participation in the CFSP process and linkages to the CFSP outcome by epistemic communities within the resource scarcity school are presented separately below followed by a brief summary.

4.2.1 Participation in the CFSP negotiation

The view from the text analyse was not objected to in the interviews. For example, the conflict in Darfur (that was mentioned in the CCIS report) was discussed: *“we can never identify it [water and arable land scarcity] as the only factor explaining the conflict, because we don’t know. There is oil, ethnic tensions and climate change is making living more difficult. How these factors mix is very complex”, “loss of agricultural productivity is one negative effect of climate change. There is a climbing population, less land and more trouble”* but also about climate change in general *“in the coming 50 years the world map will be changed”, “climate change is not the origin of conflict, but climate change aggravates factors that may create conflict and tension [such as scarcity in renewable natural resources]”* (COM Interview 2008b)

In the interviews there was an understanding that non-state actors had participated in the CFSP process wanting and aiming to influence the two reports. *“The making of the CCIS report is an ongoing process with clear recognition of civil society... a commitment to include the civil society in the process and setting a partnership with civil society”* (COM Interview 2008) and *“there has been informal consulting with non-state actors to draft the CCIS document. The civil society had to sign up for the ‘peace building partnership’ to be able to be consulting. It was not an open consultation”* (COM Interview 2008), *“Yes [there was participation]. In the commission and the council workshop were held where non-state actors were invited to talk”* (COUNCIL Interview 2008). The interviews expressed that civil society and non-state actors participated in the CFSP negotiation. The statements also express that non-state actors were aiming to influence the CFSP negotiation (in particular related to the CCIS report) because the non-state actors had to apply for joining the consultation. Civil society is vague when determining epistemic community participation, but the role of “academia” and “scientists” was also highlighted in the interviews which could refer to epistemic communities: *“‘academia’ is included in civil society, academia as well as other non-state actors. The process to draft the CCIS report took about one year and constituted of serious international conferences, workshops which included academia. The CCIS is a draft of what has been discussed in these conferences”* (COM Interview 2008) *“Academic [non-state actor] or not have been taken into account. I don’t have a percentage [on if scientists participated more than other non-state actors] ..., for example last year the Organisation for*

Security and Co-operation in Europe (OSCE) introduced environment security strategy process that helped informing our own line on the issue. They [OSCE] have prepared brainstorming workshops, inviting different NGO:s, the EU, scientists, analysts etc. It was a collective brainstorming experience – and we did that in “a low scale” last December [for the CCIS report].” (COUNCIL Interview 2008) According to the interviews epistemic communities was present (academia and scientists), but a clear distinction between epistemic communities and other non-state actors was not present: *“I think that they [epistemic communities] were well motivated, maybe equal as other parts of civil society, all parties were active.”* (COM Interview 2008) and *“...workshop were held where non-state actors were invited to talk, for example the Institution for Environmental Security and the International Institute for Sustainable Development”* (COUNCIL Interview 2008).

4.2.2 Participation linked to the CFSP outcome?

Communication between non-state actors (among them epistemic communities) and decision makers was verified: *“Yes, it [participation, communication] was mutual; we are talking of proper consultation.”* (COM Interview 2008) According to the interviews, civil society (where academia is a part) also had an effect on the CFSP outcome (at least the CCIS). The participation of epistemic communities (and other non-state actors) could be linked to the CFSP outcome. It could thereby be understood as partly shaping the CFSP outcome: *“Absolutely yes [that the participation of non-state actors had an effect on the two documents] I think we have an excellent network of actors. The cooperation with the academia [as one example] is very good. We would have had a report [CCIS] with a lower profile if not including civil society. The report [CCIS] is approved by the council, but I think that implementation of the CCIS require more work via the peace building partnership”* (COM Interview 2008), *“Yes, this [input for the document, in particular the CCIS] is the purpose of the consultations. How much this participation can be linked to the outcome I don’t know, but the participation help seeing different views [of environmental security] and which direction we [the EU] could take.”* (COUNCIL Interview 2008) The interviews do not uphold that epistemic communities (or “academia” and “scientists”) are considered to be particularly influential in affecting the outcome, even though they are mentioned as one non-state actor that have an affect on (linked to) the CFSP outcome.

4.2.3 Brief summary of participation and linkages findings

The data collected from the interviews verified epistemic communities’ participation in the CFSP process, for example in workshops related to the CFSP outcome. Epistemic communities’ participation was also verified linked to the CFSP outcome. Epistemic

communities, among other non-state actors, were mentioned to have shaped the CFSP outcome, for example providing insights on the environmental security subject.

4.3 None, low or high influence?

By turning to the point of reference in this study,³⁷ the two parts in this study (correlation and participation) could be united. Before determining this, however, some central difficulties in the realisation of the study must be addressed.

It is difficult to outline if epistemic communities with a neo-Malthusian view were present in the CFSP process and linked to the CFSP outcome. The interviews were conducted with departure from the text analysis results and the neo-Malthusian understanding in the CFSP outcome were understood as verified in the interviews. Thus, when the interview participants talked about “academia” and “scientists” in the CFSP process, this could have been in relation to this context. That it was epistemic communities with a neo-Malthusian understanding that participated in the CFSP negotiation could thereby be somewhat strengthen. However, this does not strengthen possible linkages between epistemic communities and the CFSP outcome. Even though the importance of “science” was mentioned in the interviews, there is no support that epistemic communities bring the scientific understanding into the CFSP outcome “more” than other non-state actors.

One other shortcoming in the interviews was to determine if the interview participants referred to the epistemic community definition used in this thesis. When mentioning “scientists” and “academia” it is quite uncertain if it is a sufficient indicator for measuring epistemic communities. The interview participants had little time to allocate for the informant interviews and it was hard to receive sufficient information about the epistemic communities that the interview participants claimed participated in the CFSP negotiation. One that was mentioned, the International Institute for Sustainable Development (IISD), describes it self as “a policy research institute dedicated to effective communication of our findings [for example to decision makers in government]” (IISD 2008). Even though this institute could constitute a “scientific institute” and be a measure of an epistemic community it is a challenging task to investigate.³⁸

These are some main weaknesses for the discussion of low or high influence that was noticed during conducting the interviews. Yet, what can be stated about low or high influence? The informant interviews verified epistemic communities’ participation in the

³⁷ Low influence: epistemic community participation in the CFSP negotiation was verified in interviews. High influence: epistemic community understandings correlate with the CFSP outcome, when participation of epistemic communities with this view is verified to have, at least partly, shaped the CFSP outcome *and* when this can be confirmed with other documentation.

³⁸ I also tried to get a list of the actors participating in the “Peace Building Partnership” from the Commission to investigate further, but without success.

CFSP process. Following the criteria's integrated in the point of reference, epistemic community could at least be considered enough for the *low level* of influence. What about high influence? The criteria for high influence could be thought to be fulfilled regarding the first to criteria's (correlation was present and participation/linkages were verified), but not the third criteria that covers complementary documentation. Participation is a condition for linkages, and the result points in a direction for potential higher influence, but it can not be concluded with this study. Sources independent of the ones from the interviews are needed. Epistemic communities' could have been a part of shaping the CFSP outcome, but one must remember that the empirical base provided here is thin to provide assumptions of high influence.

5. Conclusions

The overall conclusion is that epistemic communities could help understand how and why environmental issues have gained a place in the CFSP in the EU.

The thesis first question, how the EU incorporates environmental aspects in the CFSP outcome, is answered with guidance from the analytical tool elaborated in this study. The text analysis showed that the understandings of the resource scarcity school (the *neo-Malthusian ideal type*) were embedded in the CFSP outcome, at least to some extent if comparing with the Cornucopian understanding.

The thesis' second question, if epistemic community participation in the CFSP negotiation can explain the CFSP outcome, is answered with guidance from the interview guide and the point of reference. The data from the interviews, related to the point of reference, showed that epistemic community participation in the CFSP negotiation could be concluded to be low. Key employees at the Commission and the Council verified epistemic community participation. Linkages between participation and the CFSP outcome were also verified, but it was harder to draw conclusions about high epistemic community influence on the CFSP outcome.

6. Discussion

Was the epistemic community theory helpful when striving to explain how and why environmental issues appear in international security politics? Even though there could be other factors for why environmental issues gain a place in international security politics, epistemic communities show to be a potential explanation in this study.

The study demonstrates that dependence for information is a feature in the CFSP negotiation regarding the incorporation of environmental issues (even though it is a security matter). It is tempting to draw parallels with the epistemic community theory assumption that

decision makers faced by uncertainty are “dependent”, or at least receptive, to knowledge and information provided and disseminated by epistemic communities. Epistemic community information and knowledge is noticeable, but it might not be epistemic community’s knowledge and information *in particular* that decision makers seek. Both epistemic communities *and* other non-state actors’ information are emphasised shaping the CFSP outcome. Thus, receptiveness for information is apparent, but not only circulated from epistemic communities.

The critic towards epistemic communities that the uncertainty in science it self could be used to delay instead of informing policy is not supported in this study. In contrast, the interviews pointed at the informative role of non-state actors, where epistemic communities are included to inform the documents. With a starting point also in the Copenhagen schools securitisation process, it is interesting that the influence of non-state actors, epistemic communities and others, were mentioned in the interviews without reflection regarding the possible motives behind wanting to securitize environmental issues. Even though non-state actors could provide useful insights for policy in an issue area, the Copenhagen school also uphold that the other side of the token which includes hidden motives for securitisation.

One difficulty with the methodological approach was to determine indicators for epistemic communities if mentioned in the interviews. Even though the interview participants referred to “scientists” and “academia” it might not be equal to the definition of an epistemic community. The interviews gave empirical support for epistemic communities’ effect on the CFSP outcome, but it is uncertain if the indicators for an epistemic community in the interviews, such as “scientists” and “academia” referrers to the “definition” of epistemic communities provided in the epistemic community theory. Is epistemic community measured? Or is it rather consultancy firms and think-tanks that interview participants refer to when mentioning “scientists” and “academia”? Even though determining if epistemic communities *brought* the understanding into the CFSP outcome is a truly difficult task (especially in relation to other non-state actors) one might conclude that the understandings of the resource scarcity school are translated into policy and that epistemic community is one explanation which, through more empirical studies, possibly could gain further explanatory potential.

7. Further research

Further research could focus on causality, context and indirect influence. First, it was beyond the scope of this thesis to separate epistemic communities from other non-state actors. To measure epistemic community influence without giving attention to other non-state actors is problematical in relation to outlining causality. To deepen our understanding if epistemic

communities, in particular, could explain why environmental issues are gaining place as an international security threat, further research could focus more on the participation side of influence. Extensive study of participation would strengthen, or falsify, the result in this study. Then estimation of relative influence, if some non-state actor was more successful than others might be possible. In this study, we were not able to measure if other non-state actors could have been carrying epistemic community understandings or if epistemic communities and other non-state actors worked in coalitions to inform the CFSP in the EU. Second, to validate this study (which has small ambitions to generalise) the analytical tool could also be used in other contexts, not only the EU. This could compare the results in this thesis with other contexts, for example the African Union. It would shed some light on if environmental issues in international security politics, such as climate change and renewable natural resource scarcity are interpreted in a similar way outside the EU. Third, due to the central position member states are argued to have in security politics, examination of indirect epistemic community influence, for example via the presidency in the Council, would be important. An intergovernmental approach would deepen the understanding of how epistemic community influence operates.

More studies of epistemic communities' impact on security politics would expand our knowledge in a field that has been considered immune to these "forces". Even though more empirical studies are needed, this thesis showed that epistemic community is influential which makes it interesting to continue examining the "forces" of epistemic communities' on international security politics.

8. Bibliography

- Adler, Emanuel & Haas, Peter M (1992) "Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program" *International Organization* Vol: 46 (1) pp. 367-390.
- Andersson, Scott Åsa; Dreborg, Karl Henrik; Waleij, Annica & Wulff, Maria Elena (2007) "Miljö säkerhet – en översikt" *Totalförsvarets Forskningsinstitut (FOI)* FOI-R--2287--SE.
- Ayers, Robert U (1993) "Cowboys, Cornucopians, and Lon-Run Sustainability" *Ecological Economics* Vol: 8 pp 189-207. Amsterdam: Elsevier Science Publisher BV
- Barkdull, John and Harris, Paul G. (2002) "Environmental Change and Foreign Policy: A Survey of Theory". *Global Environmental Politics* Vol: 2 (2) pp. 63-91.
- Bengtsson, Rikard (2001) *Perspektiv på Världspolitik* Lund: Studentlitteratur
- Bergström, Göran and Boréus, Krisitina (2005) *Textens Mening och Makt. Metodbok i Samhällsvetenskaplig text- och diskursanalys* Lund: Student Litteratur
- Berlin, Daniel & Möller, Ulrika (2005) in *Hållbar Utveckling som Politik: Om Miljöpolitikens Grundproblem* Sverker Jagers (red) Malmö: Liber
- Betsill, Michele M and Corell, Elisabeth (2008) *NGO Diplomacy: The Influence of Nongovernmental Organisations in International Environmental Negotiations*. The MIT Press.
- Brown, Oli (2005) "The Environment and Security. How Our Understanding of the Links has changed" *International Institute for Sustainable Development*
- Boehmer-Christiansen, Sonja (1996) *The environment and international relations* Routledge: London. Vogel, John and Imber, Mark F (red)
- Buzan, Barry (1991) "New patterns of Global Security in the Twenty-First Century" *International Affairs* Vol: 67 (3) pp. 431-451.
- Buzan, Barry; Waever, Ole & de Wilde, Jaap (1998) *Security: A Framework for Analysis*. London: Lynne Rienner Publisher.
- Bremberg, Niklas and Britz, Malena (2007) "EU Civil Protection and the New Security Role of the Union" Paper presented at the 6th Pan-European International Relations Conference. Standing Group on International Relations, Turin 12-15 September.
- Chalmers, Alan Francis (1999) *What Is This Thing Called Science?* Buckingham: Open University Press. Third edition.
- Christensen Robert K (2006) "International Nongovernmental Organizations: Globalization, Policy Learning, and the Nation-State Public Administration" *Journal of Public Administration* Vol: 29 (4-6) pp 281–303.

- CCIS (2008) "Climate Change and International Security" Report from the European Commission and the Secretary-General/High Representative to the European Council. 3 March (7249/08). Available online:
http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/reports/99387.pdf (2008-03-14)
- COM Interview (2008a) EUROPEAN COMMISSION External Relations Directorate General Directorate A, Crisis Platform, Policy Coordination in Common Foreign Security Policy. Unit A 2 - Crisis Management and Peace Building, RELEX. Time for interview with the Commission: 9.30, Wednesday, 7 May 2008.
- COM Interview (2008b) EUROPEAN COMMISSION External Relations Directorate General Directorate A, Crisis Platform, Policy Coordination in Common Foreign Security Policy. Unit A 2 - Crisis Management and Peace Building, RELEX. Time for interview with the Commission: 13.30, Monday, 26 May 2008.
- COUNCIL Interview (2008) COUNCIL OF MINISTERS Planning Policy and Early Warning Unit, Policy Advisor. Time for interview with the Council: 12.30, Wednesday, 15 May 2008
- Dalby, Simon (2002) "Security and Ecology in the Age of Globalisation" *Environmental Change and Security Project Report* The Woodrow Wilson Center Vol: 8 pp. 95 - 109
- DN (2007) "Extremism i Skuggan av Klimathotet" *Dagens Nyheter* 4 August 2007. Available online: <http://www.dn.se/DNet/jsp/polopoly.jsp?d=148&a=677057> (2008-03-11)
- De Soysa, Indira (2002) "Ecoviolence: Shrinking Pie or Honey Pot" *Global Environmental Politics* Vol. 2 (4) pp. 1-34
- Dimond, Jared M (2006) *Collapse: How Societies Choose to Fail or Succeed* Chapter 10, London: Penguin UK.
- Dunlop, Claire. (2000) "Epistemic Communities: A Reply to Toke" *Politics* Vol: 20 (3) pp. 137- 144.
- Elliot, Lorraine (2004) *The International Politics of the Environment*. Palgrave: New York.
- Ehrlich, Paul R and Ehrlich, Anne H (1996) *Betrayal of Science and Reason: How Anti Environmental Rhetoric Threatens Our Future*. Washington, D.C.: Island Press
- Eriksson, Johan & Noren, Erik (2002) "Setting the Agenda of Threats: An Explanatory Model" *Uppsala Research Papers* Uppsala University, Institution for Peace and Conflict Research.

- Esaiasson, Peter; Mikael, Gilljam; Henrik Oscarsson & Lena Wängneerud (2007) *Metodpraktikan. Konsten att Studera Samhälle, Individ och Marknad*. Edition 3:1. Nordstedts Juridik AB
- ESS (2003) "European Security Strategy - A Secure Europe in a Better World" Brussels, 12 December 2003. Available online: http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/reports/78367.pdf (2008-03-12)
- Fiona Hayes-Renshaw and Helen Wallace (2006) *The Council of Ministers* The European Unions Series. Basingstoke: Macmillan
- Gleditsch, Nils Petter. (1998) "Armed Conflict and the Environment: A Critique of the Literature" *Journal of Peace Research* Vol: 35 (3) pp. 381-400 Special Issue on Environmental Conflict Sage Publications, Ltd.
- Gleditsch, Nils Petter (2001) "Environmental Change, Security, and Conflict", in Chester, A. Crocker, Fen Osler Hamspon and Pamela Aall (eds.): *Turbulent Peace. The Challenges of Managing International Conflict*. Washington D.C: United States Institute of Peace Press
- Gleditsch N P. & Theisen O (2006) "Resources, the Environment and Conflict" *Centre for the Study of Civil War* (PRIO).
- Gleditsch, Nils Petter and Nordås, Ragnhild (2007) "Climate Change and Conflict" *Political Geography* pp. 627-638.
- Gleick Peter H (1998) "Water in crisis: Paths to Sustainable Water Use" *Ecological Application* Vol: 8 (3) pp. 571 579.
- Graeger, Nina (1996) "Environmental Security" *Journal of Peace Research* Vol: 33 (1) pp. 109-116.
- Gulbrandsen, Lars H and Andresen, Steinar (2004) "NGO Influence in the Implementation of the Kyoto Protocol: Compliance, Flexibility Mechanisms, and Sinks" *Global Environmental Politics* Vol: 4:4.
- Haas, M. Peter (1992) "Introduction: Epistemic Communities and International Policy" *International Organization*. Vol: 46 (1) pp 1-35. Knowledge, Power, and International Policy Coordination.
- Hayes-Renshaw, Fiona & Wallace, Helen (2006) *The Council of Ministers* Basingstoke: Macmillan
- Homer-Dixon, Thomas F (1991) "On the Threshold. Environmental Changes as Causes of Acute Conflict" *International Security* Vol: 16 (2).
- Homer-Dixon, Thomas F (1994) "Environmental Scarcities and Violent Conflict. Evidence from Cases" *International Security* Vol: 19 (1) pp. 5-40.

- Homer-Dixon, Thomas F (1999) *Environment, Scarcity and Violence* Princeton N.J: Princeton University Press
- Howorth, Jolyon (2004) "Discourse, Ideas and Epistemic Communities in European Security and Defence Policy" *West European Politics* Vol: 27 (2) pp. 211-234.
- IISD (2008) <http://www.iisd.org/about/> (2008-05-20)
- Jordan, Andrew (2005) *Environmental Policy in the European Union. Actors, Institutions & Processes* Second edition. London: Sterling
- Julian, Simon L (1996) *The Ultimate Resource 2* Princeton New Jersey: Princeton University Press.
- Julian, Simon L (1994) "More People, Greater Wealth, More Resources, Healthier Environment" *Economic Affairs* 14 (3) pp. 22-29
- John W. Maxwell and Rafael Reuveny (2000) "Resource Scarcity and Conflict in Developing Countries" *Journal of Peace Research*. Vol: 37 (3) pp. 301-322.
- Kaplan, Robert D (1994) "The Coming Anarchy" *The Atlantic Monthly* Vol: 273 (2) pp. 44-76.
- Kahl Colin H (1998) "Population Growth, Environmental Degradation, and State-Sponsored Violence: The Case of Kenya, 1991-93" *International Security* Vol: 23 (2) pp.80-119.
- Legro, Jeffrey W & Moravcsik, Andrew (1999) "Is anybody still a realist" *International Security* Vol: 24 (2) pp. 5-55.
- Lomborg, Bjorn. (2001) *The Skeptical Environmentalist. Measuring the Real State of the World* Cambridge: Cambridge University Press
- Matthew Richard A (2008) "Resource Scarcity: Responding to the Security Challenge" *International Peace Institute* www.ipinst.org
- Myers, Norman and Simon, Julian L (1994) *Scarcity or abundance?: A Debate on the Environment* New York: W.W. Norton & Co.
- Nugent, Niell & Paterson, William E. (2006) *The Government and Politics of the European Union* Palgrave, New York Union Series. Sixth edition
- Nye, Joseph S. Jr (1988) "Review: Neorealism and Neoliberalism" *World Politics* Vol: 40 (2) pp. 235-251
- Rønnfeldt Carsten F (1997) "Three Generations of Environment and Security Research" *Journal of Peace Research* Vol: 34 (4) pp. 473-482.
- Renner, Michael; Brown, Lori & Starke, Linda (2005) *The State of the World 2005: a Worldwatch Institute Report on Progress Towards a Sustainable Society* London: Earthscan

- Sebenius, James K (1992) "Challenging Conventional Explanations of International Cooperation: Negotiation Analysis and the Case of Epistemic Communities" *International Organization* Vol: 46 (1) pp. 323-365. Knowledge, Power, and International Policy Coordination.
- Smith, Michael E (2004) "Toward a Theory of EU Foreign Policy-Making: Multi-Level Governance, Domestic Politics, and National Adaptation to Europe's Common Foreign and Security Policy" *Journal of European Public Policy* Vol: 11 (4) pp. 740-758
- SvD (2007) "EU Får Tydlig Röst För Fred" *Svenska Dagbladet* 13 January 2008. Available online: http://www.svd.se/opinion/brannpunkt/artikel_767769 (2008-04-01) My translation Swedish – English
- Sugden, Jennifer (2006) "Security Sector Reform: the Role of Epistemic communities in the UK" *Journal of Security Sector Management* Vol: 4 (4)
- Toke, David (1999) "Epistemic Communities and Environmental Groups" *Politics* Vol: 19 (2) pp. 97-102.
- The European Commission (2008) http://ec.europa.eu/external_relations/cfsp/esdp/index.htm (2008- 04-02)
- The Council (2008a)
http://www.consilium.europa.eu/cms3_fo/showPage.asp?id=248&lang=SV&mode=g (2008-03-04)
- The Council (2008b)
http://www.consilium.europa.eu/cms3_fo/showPage.asp?id=956&lang=sv&mode=g (2008-05-04)
- The Council (2008c)
http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/articles/99770.pdf (2008-02-10)
- Timura, Christopher T (2001) "Environmental Conflict and the Social Life of Environmental Security Discourse" *Anthropological Quarterly* Vol: 74 (3) pp. 104-113.
- Tonra, Ben & Christiansen, Thomas (2004) *Rethinking European Foreign and Security Policy* Manchester University Press.
- Urdal, Henrik (2005) "People vs. Malthus: Population Pressure, Environmental Degradation, and Armed Conflict Revisited" *Journal of Peace Research* Vol: 42 pp. 417-434.
- Weyand, Sabine (1999) *Environmental Security: Just another green fashion?* European Union, External Relations. European Communities: Italy. Office for Official Publications of the European Communities.

- Yee, Albert S. (1996) "The Causal Effect of Ideas on Policy" *International Organisation* Vol: 50 (1) pp. 69-108.
- Zito, Anthony R. (2001) "Expert Groups" *Science and Public Policy* Vol: 28 (6) pp. 465-476.

Appendix 1: Informant interview guide

Theme 1: General introduction questions

1. *What is your exact position in the European Commission/the Council of Ministers?*
 2. In my thesis I have been concentrating on the **European Security Strategy** and the report **Climate Change and International Security**. I understand that you have been partly responsible for/involved in the process regarding the Climate Change and International Security report/European Security Strategy. *Is this correct?*
 3. I also understand that these documents express a link between global warming and increased competition over natural resources (especially water) which could contribute to migration and possibly even conflict now and over time. *Could you, briefly, explain how you believe this development to include environmental aspects in the CFSP started? What do you believe is the main influences?*
-

Theme 2: Participation?

1. The European Security Strategy and the Climate Change and International Security report express that resource scarcity could contribute to conflicts and that this could increase in the future. What have brought this understanding into the CFSP of the EU?
2. Do you believe that non-state actors have participated in the “CFSP process”? (For example via meetings, conferences, advice)
3. Do you believe that non-state actors have participated in the “CFSP process” wanting and aiming to influence these two documents?
4. Do you believe that *scientific communities (or single scientists)* have engaged in the “CFSP negotiation”, wanting and aiming to influence these two documents? What role did scientific communities (or single scientists) have in the CFSP process in relation to these two documents?
5. In comparison to other non-state actors, do you believe that scientific communities (or single scientists) *in particular* have engaged in the “CFSP process” wanting and aiming to influence these two documents? (Scientific communities (and single scientists) or other non-state actors?)
6. Could you give an example of scientist’s participation relating to the ESS or CCIS? What kind of activities did scientific communities (or single scientists) engage in?
7. Could you give an example of scientific communities/network/scientists that has been participating in the “CFSP negotiation”?

If totally “no, scientific community was not present at all”:

When the understanding from environmental security research (resource scarcity) is compared to the CFSP (ESS and CCIS) a correlation is at least partly visible. What brought this into the CFSP? Could you explain that a bit further what you believe brought this understanding into the two documents?

Help questions:

Could you tell me more about this?

Could you explain this a bit further?
Do you mean that...?

Theme 3: Process tracing and Counter Factual

1. Which scientific communities (or single scientists) were decision-makers aware of in the “CFSP negotiation”?
 2. Would you say that there was communication (for example conferences, hearings, advice giving) between scientific communities (or single scientists) and decision-makers in the “CFSP negotiation”?
 3. Do you believe that this communication between scientific communities (or single scientists) was valuable to the decision-makers when the two documents the CCIS and ESS was formulated?
 4. Do you believe that the outcome of the two documents, with regard to the incorporation environmental aspects, would be different if scientific communities (or single scientists) did not advice and advocate their understanding of environment and security?
 5. Do you believe that the participation of scientific communities (or single scientists) had an effect on the CFSP outcome (the two documents)?
 6. Could participation in the “CFSP process” by scientific communities (or single scientists) be linked to the content of the two documents (ESS and CCIS)?
-

Theme 4: Ending

1. Is there something more you would like to add regarding this before the interview is coming to an end?
2. Do you wish to be anonymous in my thesis? Or could I mention your name in the thesis?
3. If any more questions turn up later on, is it all right to contact you via e-mail or phone again?

Appendix 2 – Information Regarding Informant Interviews



GÖTEBORGS UNIVERSITET
Statsvetenskapliga institutionen

To whom it may concern,

At the present I am writing my master thesis for the department of political science at Göteborg University.

The thesis addresses environmental security in the European Union's Common Foreign and Security Policy. It should contribute to the knowledge of how environmental aspects are incorporated in the CFSP and also why this development is taken place. The European Security Strategy and the Climate Change and International Security report express a link between global warming and increased competition over natural resources (especially water) which may result in migration and conflicts. To understand why this view is incorporated in these documents is the focal point of the interviews.

Interviews with key persons in the CFSP process are necessary for the realisation of the study. Your participation in an interview would be highly appreciated and important to fulfil the thesis purpose. The time duration of an interview would be approximately 30 minutes and the interviews will be anonymous.

If you are able to participate in an interview, please let me know what date would be the most suitable for you. For further information about the study, please contact me or my advisor Ulrika Möller. Contact details are listed below.

Yours sincerely,

Elin Israelsson

Advisor:
Ulrika Möller
ulrika.moller@pol.gu.se
0046 (0) 31 786 1241

Author:
Elin Israelsson
eisraelsson@gmail.com
0044 (0) 79 42 557 459